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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,824	01/23/2004	Thomas Hubert Van Steenkiste	DP-309186	5012
7590 SCOTT A. MCBAIN DELPHI TECHNOLOGIES, INC. Legal Staff, Mail Code: 480-410-202 P.O. Box 5052 Troy, MI 48007-5052		01/28/2008	EXAMINER GANEY, STEVEN J	
			ART UNIT 3752	PAPER NUMBER
			MAIL DATE 01/28/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/763,824	STEENKISTE ET AL.
	<b>Examiner</b> Steven J. Ganey	<b>Art Unit</b> 3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 29 October 2007.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

1. Receipt is acknowledged of the amendment filed on October 29, 2007, which has been fully considered in this action.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

3. Claims 1-3, 5 and 6 rejected under 35 U.S.C. 102(b) as being anticipated by Prastrofer.

Prastrofer discloses a spray nozzle “A” comprising a converging region 12a; a divergent region 14; a throat 13; and an expansion rate of at least 5 millimeters squared per millimeter, see dimensions in col. 3, lines 29 through 36.

With respect to applicant’s statement of intended use in the preamble, i.e. supersonic kinetic spray nozzle, the device of Prastrofer is capable of performing applicant’s intended use, therefore, the claims are fully anticipated and the statement has not been given patentable weight.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prastrofer.

Prastrofer discloses all the featured elements of the instant invention, except for the expansion rate being at least 10 millimeters squared per millimeter. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the expansion rate range as claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Alert, 105 USPQ 233.

6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Steenkiste et al '913 in view of Prastrofer.

Steenkiste et al '913 discloses all the featured elements of the instant invention except for the nozzle having an expansion rate of at least 1.0, 2.5, 5.0 or 10 millimeters squared per millimeter. Prastrofer, as discussed above, discloses a de Laval type nozzle(i.e. a converging diverging nozzle) having the expansion rates as claimed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute one de Laval type nozzle for another as, such as the de Laval nozzle as taught by the Prastrofer reference, for the de Laval type of the Steenkiste et al '913 device wherein so doing would amount to the mere substitution of one functionally equivalent de Laval nozzle for another within the same art and the selection of any one of these de Laval nozzles would work equally well in the Steenkiste et al '913 device. Also such a modification would enhance the operation and facilitate the spray coating by providing a highly effective spray pattern in suppressing overspray.

As to claims 4, 10 and 16, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the expansion rate range as claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

***Response to Arguments***

7. Applicant's arguments, see pages 6 and 7, filed October 29, 2007, with respect to the rejection(s) of claim(s) 1, 5-7, 11-13 and 17-20 under 35 U.S.C. 102(b) as being anticipated by US 2003/0228414 and claims 2-4, 8-10 and 14-16 under 35 U.S.C. 103(a) as being unpatentable over US 2003/0228414 have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Prasthofer and Van Steenkiste et al '913.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven J. Ganey whose telephone number is 571-272-4899. The examiner can normally be reached on 9:00-5:00; Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sjg  
1/14/08

  
STEVEN J. GANEY  
PRIMARY EXAMINER

1/14/08